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EXAMINER

MOORTHY, ARAVIND K

ART UNIT PAPER NUMBER

2131

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/871,415

Applicant(s)

PERLMAN, STEPHEN G.

Examiner

Aravind K Moorthy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-28 is/are allowed.
- 6) ☒ Claim(s) 1-22 and 29-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/7/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This is in response to the communication on 7 October 2004.
2. Claims 1-56 are pending in the application.
3. Claims 1-22 and 29-56 have been rejected.
4. Claims 23-28 have been allowed.

#### ***Response to Amendment***

5. With the amendment to claim 47, the examiner withdraws the claim objection. The misspelling has been corrected.
6. With the amendment to claim 50, the examiner withdraws claim Rejection 35 USC § 112 (2). The applicant has corrected the improper dependency.

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-55 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

**8. Claims 1-4, 8-19, 29-32, 36-40 and 56 are rejected under 35 U.S.C. 102(e) as being anticipated by Ludtke U.S. Patent No. 6,154,206.**

As to claims 1, 29 and 56, Ludtke discloses a computer-implemented method for processing multimedia channels comprising:

encrypting a first group of multimedia channels using a first type of encryption to produce a first group of encrypted multimedia channels [column 7, lines 47-64],

encrypting the first group of multimedia channels using a second type of encryption to produce a second group of encrypted multimedia channels [column 7, lines 47-64],

concurrently transmitting the first group of encrypted multimedia channels with the second group of multimedia channels to a plurality of multimedia subscribers having multimedia receivers capable of decrypting the first group of encrypted multimedia channels and/or the second group of multimedia channels [column 11, lines 11-36].

As to claims 2, 18, 30 and 42, Ludtke discloses that the first type of encryption is standard conditional access ("CA") encryption [column 10, lines 16-27].

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As to claims 3, 19, 31 and 43, Ludtke discloses that the second type of encryption is digital video broadcast ("DVB") encryption [column 9 line 49 to column 10 line 5].

As to claims 4 and 32, Ludtke discloses that the first group of multimedia channels are subscription based channels [column 9 line 49 to column 10 line 5].

As to claims 8 and 36, Ludtke discloses that the method further comprises:

transmitting a second group of multimedia channels in an unencrypted format [column 10, lines 28-48].

As to claims 9 and 37, Ludtke discloses that the second group of multimedia channels are basic cable channels and the first group of multimedia channels are subscription-based cable channels [column 10, lines 28-48].

As to claims 10 and 38, Ludtke discloses that the method further comprises:

encrypting a first subset of the basic cable channels using the first type of encryption to produce a first group of encrypted basic cable channels [column 7, lines 47-64];

encrypting the first subset of the basic cable channels using the second type of encryption to produce a second group of encrypted basic cable channels [column 7, lines 47-64]; and

concurrently transmitting the first group of encrypted basic cable channels with the second group of encrypted basic cable channels to the plurality of multimedia subscribers [column 11, lines 11-36].

As to claims 11 and 39, Ludtke discloses that the method further comprises:

transmitting a second subset of the basic cable channels in an unencrypted format [column 10, lines 28-48].

As to claims 12 and 40, Ludtke discloses that the method further comprises:

regularly transferring channels from the first subset of basic cable channels to the second subset of basic cable channels and channels from the second subset of basic cable to the first subset of basic cable channels [column 10, lines 28-48].

As to claim 13, Ludtke discloses a method comprising:

receiving a plurality of channels from content providers at a cable headend [column 7, lines 47-64];

simulcasting premium cable channels to a plurality of subscribers in both a first encrypted format and a second encrypted format [column 7, lines 47-64]; and

transmitting non-premium channels to the plurality of subscribers in a non-encrypted format [column 10, lines 28-48].

As to claim 14, Ludtke discloses that the method further comprises:

simulcasting a first subset of the non-premium cable channels to the plurality of subscribers in the first encrypted format and the second encrypted format [column 7, lines 47-64].

As to claim 15, Ludtke discloses that the method further comprises:

transmitting a second subset of the non-premium channels to the subscribers in an unencrypted format [column 10, lines 28-48].

As to claim 16, Ludtke discloses that the method further comprises:

regularly transferring channels from the first subset of non-premium cable channels to the second subset of non-premium cable channels and channels from the second subset of non-premium cable to the first subset of non-premium cable channels [column 10, lines 28-48].

As to claim 17, Ludtke discloses transmitting channel mapping data to the subscribers identifying non-premium channels in the first subset and in the second subset [column 8, lines 38-50].

**9. Claims 41-44 and 47-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamilton et al U.S. Patent No. 5,504,816.**

As to claim 41, Hamilton et al discloses a headend system for processing multimedia streams comprising:

a first encryption module to encrypt a first plurality of multimedia streams using a first type of encryption; and

a second encryption module to encrypt the first plurality of multimedia streams using a second type of encryption [column 5, lines 14-65]; and

a quadrature amplitude modulation module to modulate the first plurality of multimedia streams and a second plurality of unencrypted multimedia streams for transmission to a plurality of multimedia subscribers having multimedia receivers capable of decrypting the first plurality of multimedia channels encrypted using either the first type of encryption or the second type of encryption [column 4, lines 49-64].

As to claim 42, Hamilton et al discloses that the first type of encryption is standard conditional access ("CA") encryption [column 6, lines 7-24].

As to claim 43, Hamilton et al discloses that the second type of encryption is digital video broadcast ("DVB") encryption [column 5, lines 26-49].

As to claim 44, Hamilton et al discloses that the first plurality of multimedia streams are premium cable channels [column 3, lines 51-62].

As to claim 47, Hamilton et al discloses that the headend system is a centralized uplink facility for broadcasting the first plurality of encrypted multimedia streams and the second plurality of unencrypted multimedia streams to two or more other headend systems, the two or more other headend systems to broadcast the first plurality of encrypted multimedia streams and the second plurality of unencrypted multimedia streams to the plurality of multimedia subscribers [column 5, lines 49-65].

As to claim 48, Hamilton et al discloses that the centralized uplink facility only encrypts the first plurality of multimedia streams using the second type of encryption and wherein the first type of encryption is performed at the two or more other headend systems [column 6, lines 7-33].

As to claim 49, Hamilton et al discloses that the first type of encryption is standard CA encryption and the second type of encryption is an alternate form of encryption [column 6, lines 7-33].

**10. Claims 51 and 52 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al U.S. Patent No. 6,507,907 B1.**

As to claim 51, Takahashi et al discloses a system comprising:



a centralized uplink facility to receive a first plurality of multimedia streams from content providers and to encrypt the first plurality of multimedia streams using a first type of encryption; and

a plurality of headend systems to receive the first plurality of multimedia streams encrypted using the first type of encryption and to simulcast the first plurality of multimedia streams using both the first type of encryption and a second type of encryption, the first plurality of multimedia streams encrypted using the second type of encryption at either the centralized uplink facility or at the headend systems [column 4 line 18 to column 5 line 28].

As to claim 52, Takahashi et al discloses that the first plurality of multimedia streams are encrypted using the second type of encryption at each of the plurality of headend systems [column 4 line 18 to column 5 line 28].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**11. Claims 5-7, 20-22 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludtke U.S. Patent No. 6,154,206 as applied to claims 1, 13 and 29 above, and further in view of Traw et al U.S. Patent No. 6,542,610 B2.**

As to claims 5-7, 20-22 and 33-35, Ludtke does not teach that the method further comprises compressing the first group of encrypted multimedia channels using a first

compression type and the second group of encrypted multimedia channels using a second compression type. Ludtke does not teach that the first compression type is MPEG-2. Ludtke does not teach that the second compression type is MPEG-4. Ludtke does not teach a first decompression module to decompress one or more of the first plurality of multimedia streams previously compressed by content providers using the first compression type and to transmit the one or more multimedia streams to the second compression module for re-compression using the second compression type.

Traw et al teaches compressing a first group of encrypted multimedia channels using a first compression type and the second group of encrypted multimedia channels using a second compression type. Traw et al teaches that the first compression type is MPEG-2. Traw et al teaches that the second compression type is MPEG-4. Traw et al teaches a first decompression module to decompress one or more of the first plurality of multimedia streams previously compressed by content providers using the first compression type and to transmit the one or more multimedia streams to the second compression module for re-compression using the second compression type [column 4, lines 3-65].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Ludtke so that the method further comprised compressing the first group of encrypted multimedia channels using a first compression type and the second group of encrypted multimedia channels using a second compression type. The first compression type would have been MPEG-2. The second compression type would have been MPEG-4. There would have been a first decompression module to decompress one or more of the first plurality of multimedia streams previously compressed by content providers using the

first compression type and to transmit the one or more multimedia streams to the second compression module for re-compression using the second compression type.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Ludtke by the teaching of Traw et al because using compression types of MPEG-2 and MPEG-4 provides good broadcast quality and provides low bandwidth video [column 4, lines 3-7].

**12. Claims 45, 46 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton et al U.S. Patent No. 5,504,816 as applied to claim 41 above, and further in view of Traw et al U.S. Patent No. 6,542,610 B2.**

As to claims 45, 46 and 50, Hamilton et al does not teach that the method further comprises compressing the first group of encrypted multimedia channels using a first compression type and the second group of encrypted multimedia channels using a second compression type. Hamilton et al does not teach that the first compression type is MPEG-2. Hamilton et al does not teach that the second compression type is MPEG-4. Hamilton et al does not teach a first decompression module to decompress one or more of the first plurality of multimedia streams previously compressed by content providers using the first compression type and to transmit the one or more multimedia streams to the second compression module for re-compression using the second compression type.

Traw et al teaches compressing a first group of encrypted multimedia channels using a first compression type and the second group of encrypted multimedia channels using a second compression type. Traw et al teaches that the first compression type is MPEG-2. Traw et al teaches that the second compression type is MPEG-4. Traw et al teaches a first decompression

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module to decompress one or more of the first plurality of multimedia streams previously compressed by content providers using the first compression type and to transmit the one or more multimedia streams to the second compression module for re-compression using the second compression type [column 4, lines 3-65].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Hamilton et al so that the method further comprised compressing the first group of encrypted multimedia channels using a first compression type and the second group of encrypted multimedia channels using a second compression type. The first compression type would have been MPEG-2. The second compression type would have been MPEG-4. There would have been a first decompression module to decompress one or more of the first plurality of multimedia streams previously compressed by content providers using the first compression type and to transmit the one or more multimedia streams to the second compression module for re-compression using the second compression type.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Hamilton et al by the teaching of Traw et al because using compression types of MPEG-2 and MPEG-4 provides good broadcast quality and provides low bandwidth video [column 4, lines 3-7].

**13. Claims 53-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al U.S. Patent No. 6,507,907 B1 as applied to claim 51 above, and further in view of Traw et al U.S. Patent No. 6,542,610 B2.**

As to claims 53-55, Takahashi et al does not teach that a centralized uplink facility is further configured to compress the first plurality of multimedia channels using a first type of compression and the plurality of headend systems simulcast the first plurality of streams using both the first type of encryption with the first type of compression and a second type of encryption with a second type of compression. Takahashi et al does not teach that the first plurality of multimedia streams are compressed using the second type of compression at each of the plurality of headend systems. Takahashi et al does not teach that the centralized uplink facility is further configured to decompress one or more of the first plurality of multimedia previously compressed by content providers using the second type of compression and recompress the one or more of the first plurality of multimedia channels using the first type of compression.

Traw et al teaches a centralized uplink facility is further configured to compress the first plurality of multimedia channels using a first type of compression and the plurality of headend systems simulcast the first plurality of streams using both the first type of encryption with the first type of compression and a second type of encryption with a second type of compression. Traw et al teaches that the first plurality of multimedia streams are compressed using the second type of compression at each of the plurality of headend systems. Traw et al teaches that the centralized uplink facility is further configured to decompress one or more of the first plurality of multimedia previously compressed by content providers using the second type of compression and recompress the one or more of the first plurality of multimedia channels using the first type of compression [column 4, lines 3-65].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Takahashi et al so that that a centralized uplink facility would have been configured to compress the first plurality of multimedia channels using a first type of compression and the plurality of headend systems simulcast the first plurality of streams using both the first type of encryption with the first type of compression and a second type of encryption with a second type of compression. The first plurality of multimedia streams would have been compressed using the second type of compression at each of the plurality of headend systems. The centralized uplink facility would have been configured to decompress one or more of the first plurality of multimedia previously compressed by content providers using the second type of compression and recompress the one or more of the first plurality of multimedia channels using the first type of compression.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Takahashi et al by the teaching of Traw et al because using compression types of MPEG-2 and MPEG-4 provides good broadcast quality and provides low bandwidth video [column 4, lines 3-7].

*Allowable Subject Matter*

**14. Claims 23-28 are allowed.**

As to claim 23, prior art does not disclose or fairly suggest simulcasting the channels encrypted in both CA encryption and the different form of encryption to subscribers having either a new multimedia receiver or a legacy multimedia receiver.

Claims 24-28 are allowed on the virtue of their dependency with claim 23.

*Conclusion*

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aravind K Moorthy whose telephone number is 571-272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aravind K Moorthy  
March 1, 2005

*Guy J. Lamarre*  
*Primary Examiner*